

***LineUp With Math™* Alignment**
Essential Academic Learning Requirements
And Grade Level Expectations

EALR 1: The student understands and applies the concepts and procedures of mathematics.

Component 1.1: Understand and apply concepts and procedures from number sense.

NUMBER AND NUMERATION

GLE 1.1.4 Understand the concept of direct proportion.

Evidences of Learning	<i>LineUp With Math™</i> Activities
<ul style="list-style-type: none"> Express proportional relationships using objects, pictures, and symbols. 	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
<ul style="list-style-type: none"> Solve problems involving proportions. 	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
<ul style="list-style-type: none"> Use ratios to make predictions about proportions in a future situation. 	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

EALR 2: The student uses mathematics to define and solve problems.

Component 2.1: Understand problems.

GLE 2.1.1 Analyze a situation to define a problem.

Evidences of Learning	<i>LineUp With Math™</i> Activities
<ul style="list-style-type: none"> Define the problem. 	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Component 2.2: Apply strategies to construct solutions.

GLE 2.2.1 Apply strategies, concepts, and procedures to devise a plan to solve the problem.

Evidences of Learning	<i>LineUp With Math™</i> Activities
<ul style="list-style-type: none"> Select and apply appropriate mathematical tools for a situation. 	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

GLE 2.2.2 Apply mathematical tools to solve the problem.	
Evidences of Learning	LineUp With Math™ Activities
<ul style="list-style-type: none"> Implement the plan devised to solve the problem. 	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
<ul style="list-style-type: none"> Check the solution to see if it works. 	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

EALR 3: The student uses mathematical reasoning.

Component 3.2: Make predictions, inferences, conjectures, and draw conclusions.

GLE 3.2.1 Apply prediction and inference skills to make or evaluate conjectures.

Evidences of Learning	LineUp With Math™ Activities
	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

GLE 3.2.2 Apply the skills of drawing conclusions and support the conclusions using evidence.

Evidences of Learning	LineUp With Math™ Activities
<ul style="list-style-type: none"> Draw conclusions from displays, texts, or oral discussions and justify those conclusions with logical reasoning or other evidence. 	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Component 3.3: Verify results

GLE 3.3.1 Analyze procedures and information used to justify results using evidence.

Evidences of Learning	LineUp With Math™ Activities
<ul style="list-style-type: none"> Justify the reasonableness of an estimate. 	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

EALR 4: The student communicates knowledge and understanding in both everyday and mathematical language.

Component 4.2: Organize, represent, and share information.

GLE 4.2.2 Apply communication skills to clearly and effectively express or present ideas and situations using mathematical language or notation.

Evidences of Learning	LineUp With Math™ Activities
<ul style="list-style-type: none"> Clearly explain, describe, or represent mathematical information in a pictorial, tabular, graphical, two- or three-dimensional drawing, or other form as appropriate for the mathematical information (e.g., time, distance, categories), audience, and/or purpose, such as to perform or persuade, with notation and labels as needed. 	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

EALR 5: The student understands how mathematical ideas connect within mathematics, to other subject areas, and to real-life situations.

Component 5.3: Relate mathematical concepts procedures to real-world situations.

GLE 5.3.1 Understand that mathematics is used in daily life and extensively outside the classroom.

Evidences of Learning

LineUp With Math™ Activities

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

GLE 5.3.2 Understand that mathematics is used within many occupations or careers.

Evidences of Learning

LineUp With Math™ Activities

- Explain how mathematics is used in careers or occupations of interest (e.g., complete a mathematically based project).

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.